

## ABSTRACT

5 An operating system architecture and method which provides for transparent inheritance of memory management policies in data processing systems and enhanced memory management is disclosed. The operating system provides for a special "debug" process flag to be associated with debug and device management processes. When a source process transmits a message to a  
10 destination process, the operating system determines whether the source process is a debug process (i.e., whether the source process contains a debug process flag indicator associated therewith). If the source process is a debug process, a debug process flag indicator is also associated with the destination process. The operating system also reserves a portion of the device's memory (a reserve  
15 memory pool) which is only allocated to special "debug" process when the non-reserved pool of memory is depleted.